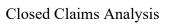
Kansas Department of Labor Workers Compensation Division

Closed Claims Analysis Calendar Year 2020





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Introduction

This study presents an analysis of a sample of Workers Compensation claims that were closed by their respective claims administrators during Calendar Year (CY) 2020. Not every injury results in a claim for indemnity benefits, but those that do allow our division to collect information about the costs of those claims. When no further payments are expected on a claim, a final report (FN) is submitted that details the total of all benefits and expenses paid to date. The final reports allow us to examine claims in terms of the benefits paid on behalf of the insured from start to finish.

The data for the present study consist of 6,616 claims taken from the set of all claims that closed in 2020 (the initial data set), excluding claims that did not meet certain restrictions, outlined in Appendix B.²A closed claim is any claim reporting at least one indemnity payment for which a final payment has been submitted.

Payment information was collected from the final payment for each claim, while basic information pertaining to the claimant and the circumstances and nature of the injury were collected from First Reports of Injury (FROIs).

¹ Certain assumptions and limitations are worth noting. Because the state of Kansas legislates the actions that employers and employees must take when a workplace injury takes place, we assume that injuries are reported honestly by both employees and their employers. EDI industry implementation standards, together with Kansas legislation, determine the sequencing of EDI files as well as which information is mandatory on a claim file. We, therefore, assume that claim administrators have received the training needed to submit correct claim and payments information to our division. We assume that when an FN is filed, no further payments are anticipated. It should be noted that this is not always the case, as claims may be reopened for various reasons, but we assume that this is true at the time of reporting.

² Because a lag can exist between when an FN report was created and when it is received by our division, we define the set of FNs by the date they were generated in the Electronic Data Interchange (EDI) system, which is not necessarily the date it was created.



1. Characteristics of Closed Claims

1.1 Duration of Closed Claims

Duration is defined as the number of days from the date that the injury is reported to the date that the final report is filed. Of the 6,616 claims in this study, the mean duration is 632 days while the median is 472 days. Figure 1.1 illustrates the distribution of the duration of claims in our sample set in terms of the number of days the claim remains open. Note that the mean duration is heavily influenced by a small percentage of claims that take several years to close, while most claims close in a much shorter time period. For this reason, the median is the more appropriate measure of duration.

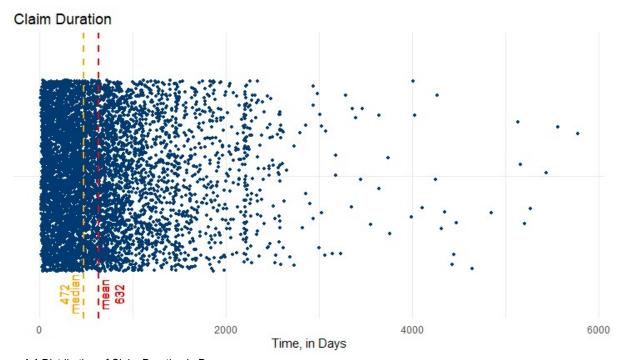


Figure 1.1 Distribution of Claim Duration in Days



Figure 1.2 shows the duration of claims by years instead of days. The year groupings have been chosen to highlight the distribution of claim duration data. Of the 6,616 closed claims, 38.4% percent of claims closed in one year or less. This makes sense as the median, or 50 percent, is equal to 472 days. The majority of claims closed in less than 2 years (69.9 percent) while only 3.1 percent of claims remained open after 5 or more years.

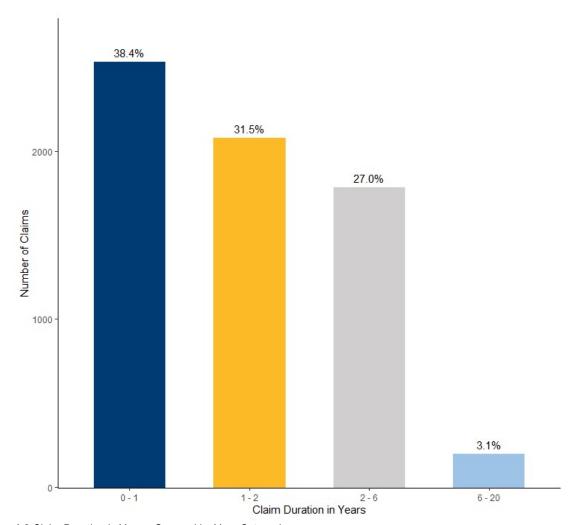


Figure 1.2 Claim Duration in Years, Grouped by Year Categories



The Workers Compensation Division has reported the median duration of a claim since 2016 and that data is plotted in Figure 1.3 for the years 2017-2020. There was a slight increase in the median duration of a claims from 2018 going into 2020, but overall this median claim duration has not changed significantly.

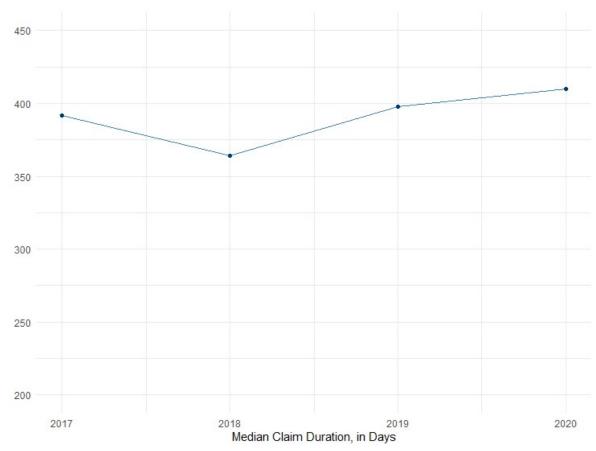


Figure 1.3 Median Duration of Claims, Years 2016 – 2019



1.2 Total Costs of Closed Claims

The total reported cost of benefits associated with indemnity claims that closed in calendar year 2020 was \$219,970,060. Medical benefits comprised the greatest share of this cost at 52.5%, followed by indemnity benefits at 42.8%, legal benefits at 4.5% and other benefits at 0.3%. Figure 1.4 illustrates total benefits paid on behalf of insurers for claims with reported indemnity benefits that closed in 2020. The total amount is given, as well the percentage that each type of expense represents of the total. Note that the medical benefits stated below are the medical benefits reported on *indemnity* claims and not claims that report only medical benefits.

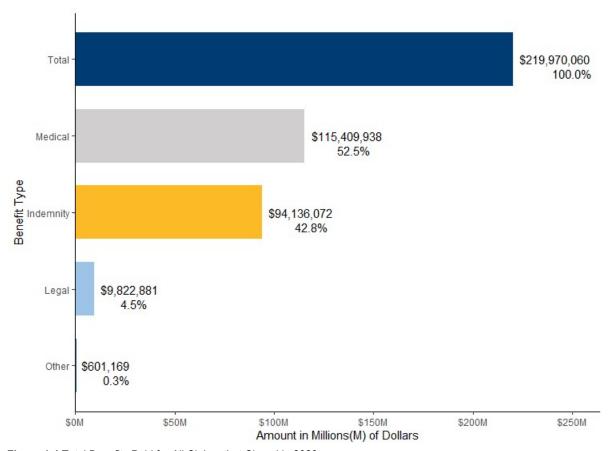


Figure 1.4 Total Benefits Paid for All Claims that Closed in 2020



In terms of individual claims, the mean cost of a claim in our 2020 claim set was \$33,248.20 while the median cost was \$18,338.76. The cost of an individual claim is defined as the total dollar amount of all expenses and indemnity payments incurred during the life of a claim. Legal and other (non-medical, indemnity, or legal) benefit types on a claim had median values of \$0. This means that, while a few claims did incur legal and other expenses, the typical claim that closed in 2020 did not involve insurer-paid benefits not categorized as indemnity or medical. Figure 1.5 below illustrates mean and median benefits by benefit type paid for the sample set of claims closing in calendar year 2020.

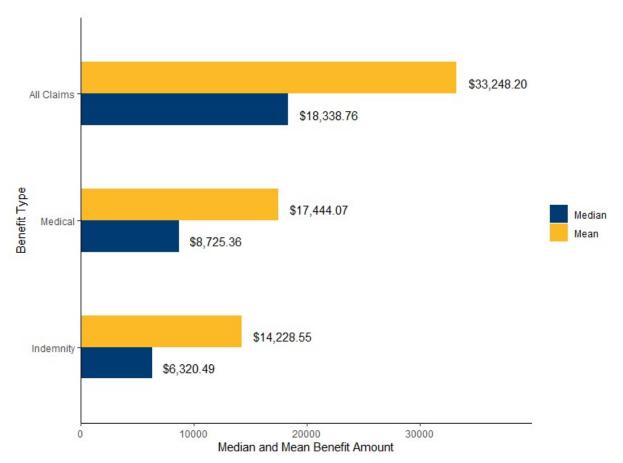


Figure 1.5 Mean and Median Paid Benefit Amounts by Benefit Type

In Figure 1.5 (above) note that the mean paid benefit amount of a claim is greater than the median paid benefit amount of a claim for both medical and indemnity benefits. This is because the mean paid amount of benefits, like mean duration, is influenced by a small percentage of very expensive claims. This positively skewed distribution of cost data is typical as there are generally a small percentage of costly claims in any given report year. For this reason, the median paid benefit amount is generally regarded as more informative than the mean. Figure 1.6 (below) illustrates the distribution of the total costs of claims data and demonstrates the similarity between the cost data and the duration data.



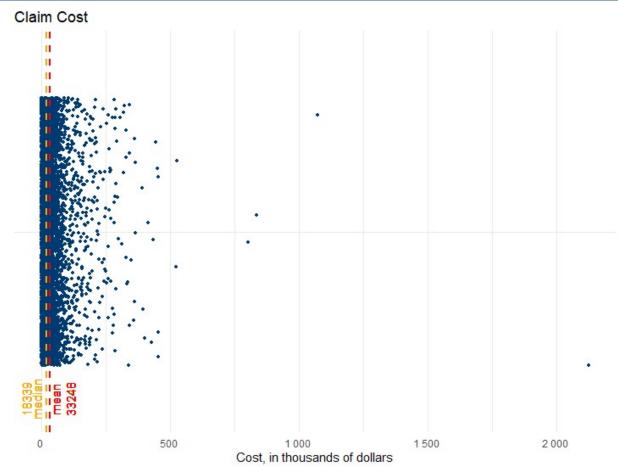


Figure 1.6 Distribution of Claim Total Paid Benefits in Thousands of Dollars



1.2.1 Contributors to Claim Cost

To better understand what contributes to the cost of a claim, the data is divided into percentiles by the total paid benefits of a claim. The lower 3 quartiles are aggregated to represent claims whose costs fall into the lower 75 percent of the distribution. The upper quartile represents claims whose costs fall into the highest quarter (25th percentile) of the distribution. The lower-cost claims set includes claims whose paid benefits total \$39,766 or less and the higher-cost claims set include claims that total greater than \$39,766. Fatal injuries are removed from the dataset before dividing into percentiles since fatalities are uncommon and expensive and could skew the characteristics of the higher-cost claims. The mean and median of each group is shown in Figure 1.7. Note that each group exhibits similar distributional properties as the entire sample set in which the mean is greater than the median.

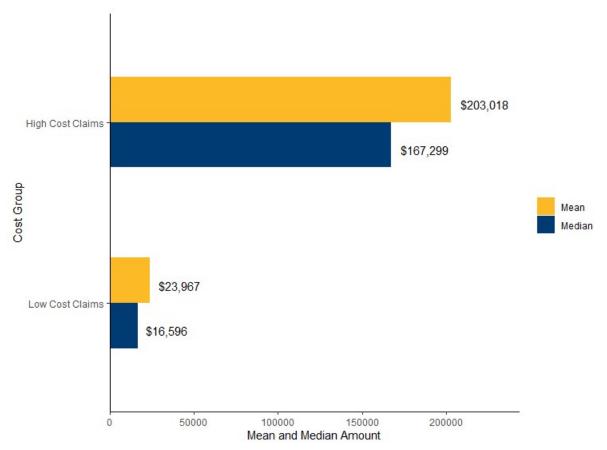


Figure 1.7 Mean and Median Cost of Claims for Lower-Cost and Higher-Cost Groups



When the costs are examined in terms of benefits paid in each group, both groups display nearly the same proportions of paid benefit amounts by each benefit type. Medical paid benefits are a slightly greater percentage of total paid benefits in the higher-cost claims, by about 10 percent. In other words, the higher-cost claims group does not exhibit significantly greater paid benefit amounts in a specific benefit type.

Table 1.1 Percentage o	of Paid Benefits in Lower-0	Cost and Higher-Cost (Groups by Benefit Type

	HIgh Cost	Low Cost
Indemnity	42.95%	46.93%
Medical	52.59%	46,93%
Legal	4.20%	5.87%
Other	0.26%	0.27%

One characteristic that higher cost claims do exhibit is longer claim duration. The mean and median duration of claims for higher and lower cost claims are shown in Figure 1.8 (below). The total cost of a claim is positively correlated with claim duration (r = 0.39), meaning that there is a weak positive relationship between the movement in claim cost as related to the movement in claim duration. This makes sense as the longer the claim remains open, the more costs may be associated with it.

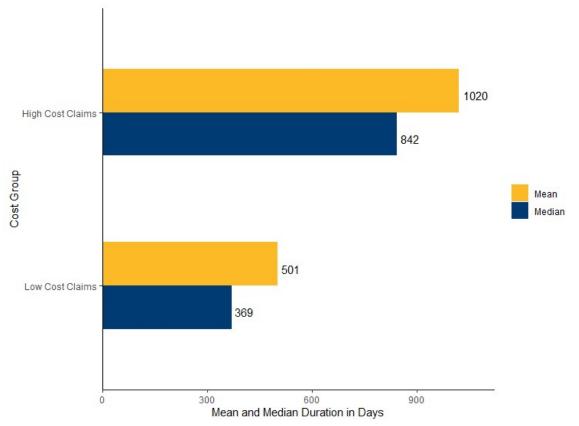


Figure 1.8 Mean and Median Claim Duration for Lower-Cost and Higher-Cost Groups in Days

1.3 Injuries Reported by Sector and Industry



In terms of economic sectors that report injuries, over one quarter (26.0 percent) of all injuries was reported as occurring in the manufacturing sector. Manufacturing contributes more than twice the amount of claims than the next highest contributor (healthcare at 13.0 percent). Other top contributing sectors are included in Figure 1.10, which illustrates the percent of injuries contributed by a specific sector as a percentage of all injuries reported for the sample set of claims that closed in 2020.

Top 10 Sectors Contributing Most Injuries

as a percentage of total injuries 26.0% 13.0% 9.7% 8.3% 8.3% 6.5% 6.1% 4.6% 3.6% 2.7% Construction Wholesale Health Transportation/ Public Educational Manufacturing Retail Admin Other Support Administration Services Care Warehousing Trade Trade Services & Waste Management

Figure 1.10 Top Ten Sectors Contributing Injury Reports by Percentage of Total Injuries Reported



When the manufacturing sector claims are disaggregated into the unique manufacturing industries that report injuries, it becomes evident that the aircraft manufacturing industry accounts for most manufacturing claims at 15.1%. This is followed by the animal (except poultry) slaughtering industry (10.5 %), the metal crown, closure, and other metal stamping industry (except automotive) (9.9%), the blind and shade manufacturing industry (6.4%), and the frozen specialty food manufacturing industry (3.2 %).

Industries Contributing most Claims as a percentage of all manufacturing claims 15.1% 10.5% 9.9% 6.4% 3.2% Metal Aircraft Animal Blind Frozen (except Poultry) Crown, Closure, Manufacturing and Shade Specialty Food Manufacturing Slaughtering and Other Manufacturing Metal Stamping (except

Automotive)

Figure 1.11 Manufacturing Industries that Report Injuries, as a Percentage of all Manufacturing Sector Reports



As a proportion of the total benefits paid on 2020 closed claims, the manufacturing sector comprised 28.3% of total paid benefits, nearly the same proportion as its percentage of the total number of reported injuries

Percentage of Total Benefits Paid by Sector 28.3% 11.5% 10.6% 9.1% 6.4% Manufacturing Construction Transportation/Warehousing Health Care Retail Trade

Figure 1.12 Proportion of Total Benefits Paid by Sector



Table 1.3 (below) displays the mean and median indemnity costs by sector, ranked in terms of mean cost. Although manufacturing contributes over a quarter of all claims and total paid benefits, it ranks 7th of 18 sectors in terms of mean cost of a claim (\$36,237.21). The Professional, Scientific and Technical Services sector has the highest mean cost of a claim at \$52,038.24.

Table 1.2 Mean and Median Total Costs of Claims by Sectors, Ranked by Mean Claim Cost

Sector	Mean Claim Cost	Median Claim Cost
Profession, Scientific, Technical Services	\$52,038.24	\$26,679.67
Construction	\$46,125.25	\$23,366.55
Mining, Oil, Gas	\$42,930.45	\$20,533.36
Finance and Insurance	\$40,289.44	\$28,491.47
Information	\$37,051.91	\$21,919.59
Agriculture, Forestry, Hunting	\$36,489.03	\$15,759.12
Manufacturing	\$36,237.21	\$22,221.06
Transportation/Warehousing	\$36,210.10	\$17,734.50
Real Estate	\$34,979.99	\$21,796.22
Admin Support & Waste Management	\$34,160.33	\$17,416.44
Educational Services	\$31,600.89	\$22,995.54
Wholesale Trade	\$30,173.96	\$14,919.37
Other Services	\$30,114.53	\$20,171.92
Public Administration	\$29,889.57	\$15,426.06
Utilities	\$28,236.63	\$19,724.63
Retail Trade	\$25,398.31	\$13,593.25
Health Care	\$23,272.99	\$9,904.31
Arts, Entertainment, Recreation	\$20,088.42	\$9,371.29



1.4 Characteristics of Injuries

When claims are filed by trading partners, they must categorize the body part injured, the cause of injury, and the nature of injury. These categories, while not identical across all states, are tracked by Workers Compensation Insurance Organizations (WICOS), and are useful for analysis in many different agencies.

1.4.1 Body Parts

The purpose of the body part category is to identify the physical parts of the body which have sustained injury. For this reason, one can select multiple body parts as well as use codes that indicate "multiple" injuries sustained to a specific region of the body. Table 1.13 (below) shows the frequency of each body part selected in the 2020 set of closed claims. It shows that, of the 8142 body parts cited in the data set, shoulder, knee, and lower back were the three most commonly selected.

Table 1.3 Total Injuries by Body Part Injured

Body Part Injured	Count	Body Part InJured	Count
Shoulder(s)	1082	Soft Tissue	83
Knee	869	Skull	74
Lower Back Area	710	Insufficient Info to Properly Identify	63
Multiple Body Parts	467	Brain	60
Wrist	422	Multiple Lower Extremities	54
Finger(s)	417	Multiple Neck Injury	51
Ankle	380	Lumbar & or Sacral Vertebrae	50
Hand	352	UpperLeg	48
Foot	260	Multiple Trunk	42
Elbow	254	Disc (Neck)	41
Lower Arm	234	Whole Body	37
Lower Leg	224	Disc (Trunk)	36
Upper Arm	218	Toes	34
Abdomen Including Groin	163	No Physical Injury	33
Upper Back Area	151	Big Toe	25
Lungs	139	Eye(s)	23
Wrist(s) & Hand(s)	131	Pelvis	23
Hip	119	Vertebrae	22
Thumb	118	Facial Bones	19
Multiple Head Injury	112	Ear(s)	18
Multiple Upper Extremities	99	Buttocks	17
Chest	97	Spinal Cord (Neck)	17
Other Facial Soft Tissue	97	Nose	18
Body Systems and Multiple Body	93	Internal Organs	15



Body part codes can also be organized by larger, more general categories based on the region of the body. The frequency of injuries of these broader categories is shown below in Figure 1.13. The more general categories make patterns of injuries more evident. For example, shoulder is the most commonly cited body part on claims and, when aggregated with other body parts in the same body region, creates an upper extremities category that accounts for 40.7% of all injuries. This is almost twice the share of total injuries as the next highest category, lower extremities, which accounts for 24.7% of all body parts selected.

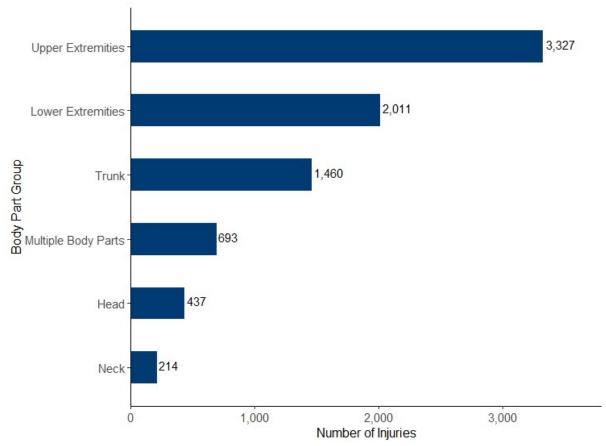


Figure 1.13 Total Injuries by Primary Body Part Group



1.4.2 Causes of Injury

The cause of injury codes describes how an injury occurred. If multiple injuries are sustained in one accident, one primary cause of injury must be identified. Table 1.4 lists the frequency of cause of injury codes that were selected for each closed claim.

Cause of injury codes, like body part codes, can be grouped more generally into primary causes of injury. For example, burns, whether resulting from hot objects or chemicals, can be aggregated as injuries caused by burns. Figure 1.14 lists causes of injury, aggregated into primary causes and grouped by frequency. The "Strain or Injury By" category refers to a strain or injury caused by a variety of movement such as twisting, lifting, pushing, reaching, etcetera, which have been grouped together. Lifting was the highest cause of injury, followed by Strains, and finally Falls/Slips/Trips.

Table 1.4 Total Injuries by Cause of Injury

Cause of InJury	Count	Cause of InJury	Count
Lifting	783	Caught, Puncture, Scrape, NOC	61
Strain or Injury By, NOC	465	Powered Hand Tool, Appliance	49
Fall, Slip or Trip, NOC	439	Hand Tool, Utensil; Not Powered	48
On Same Level	399	Hand Tool or Machine in Use	46
Repetitive Motion Carpel Tunnel Syndrome	377	Into Openings Shafts, Excavations, Floor Openings, etc.	45
Pushing or Pulling	342	Striking Against or Stepping On, NOC	44
Pandemic	241	Motor Vehicle	43
Object Being Lifted or Handled	235	Vehicle Upset/Overturned/Jackknifed	43
Twisting	225	Animal or Insect	42
On Ice or Snow	215	Jumping	30
Other - Miscellaneous, NOC	215	Other Than Physical Cause of Injury	28
From Different Level (Elevation) Off Wall, Catwalk, Bridge, etc.	214	Object Handled By Others	22
Falling or Flying Object	210	Repetitive Motion Callous, Blister, Etc.	20
From Ladder or Scaffolding	157	Moving Parts of Machine	19
Caught In, Under or Between, NOC	132	Broken Glass	15
From Liquid or Grease Spills	121	Collision with a Fixed Object Standing Vehicle or Stationary Object	15
Holding or Carrying	121	Absorption, Ingestion or Inhalation, NOC	14
Machine or Machinery	111	Stepping on Sharp Object	13
Using Tool or Machinery	103	Electrical Current	8
Struck or Injured, NOC	96	Person in Act of a Crime	8
Slipped, Do Not Fall	91	Collapsing Materials (Slides of Earth) Either Man Made or Natural	7
Stationary Object	90	Wielding or Throwing	7
Object Handled	89	Foreign Matter (Body) in Eye(s)	6
Fellow Worker; Patient	88	Moving Part of Machine	6
On Stairs	88	Explosion or Flare Back	4
Reaching	88	Continual Noise	3
Collision or Sideswipe With Another Vehicle	81	Rubbed or Abraded, NOC	3
Motor Vehicle, NOC	79	Crash of Rail Vehicle	2
Cumulative, NOC	88		



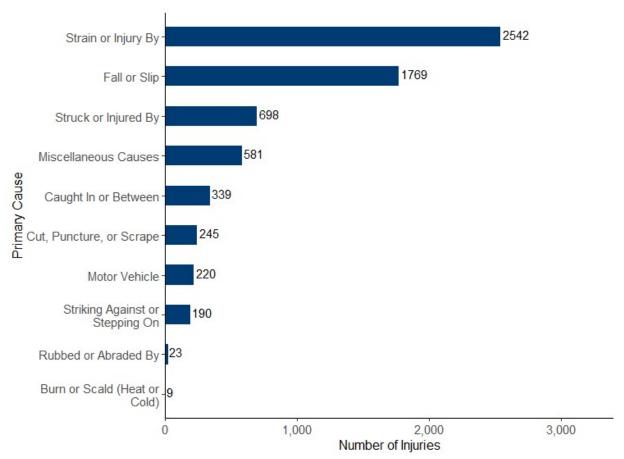


Figure 1.14 Total Injuries by Primary Cause of Injury



Some causes of injury result in costlier workers compensation claims. Figure 1.15 displays the median cost of claims, grouped by cause of injury codes, of the ten cause of injury codes with the highest median costs. Notice that the causes that resulted in claims with the highest median costs generally have the lowest frequencies (see Table 1.5).

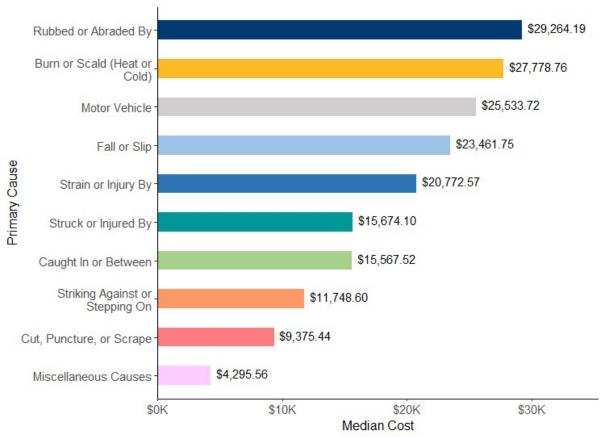


Figure 1.15 Top Ten Causes of Injury by Median Total Cost



1.4.3 Nature of Injuries

Nature of injury can be understood as a description of the injury sustained to a body part. In other words, nature of injury is the result of an accident rather than the cause. The figure below lists the frequencies of nature of injury codes as they occurred in the claims sample set.

Table 1.5 Total Injuries by Nature of Injury

Nature of Injury	Count	Nature of Injury	Count
Strain or Tear	1953	Foreign Body	11
Fracture	930	Burn	9
Sprain or Tear	628	Respiratory Disorders	7
Contusion	554	Electric Shock	6
All Other Specific Injuries, NOC	430	Hearing Loss or Impairment	5
Laceration	279	Multiple Injuries (Incl. Physical/Psychological)	5
Inflammation	250	Myocardial Infarction	3
COVID-19	241	Dermatitis	2
Multiple Physical Injuries Only	178	Poisoning - Chemical, (Other Than Metals)	2
Dislocation	168	Radiation	2
Rupture	166	Vision Loss	2
Carpal Tunnel Syndrome	164	Angina Pectoris	1
Hernia	144	Asphyxiation	1
Concussion	120	Black Lung	1
Crushing	100	Contagious Disease	1
All Other Cumulative Injury, NOC	67	Freezing	1
Amputation	59	Heat Prostration	1
Puncture	32	Loss of Hearing	1
All Other Occupational Disease, NOC	26	Mental Disorder	1
Severance	19	Mental Stress	1
No Physical Injury	17	Poisoning - General	1
Vascular	14	Syncope	1
Infection	12		



In terms of median costs associated with different nature of injury codes, there are some similarities to the causes of injury median costs. For example, the median costs of claims that listed dust disease and electric shock as the nature of the injury were very high, but the frequencies of those nature of injury codes was very low. This pattern is less extreme, but still true for other nature of injury codes with high median costs. Figure 1.16 illustrates that the majority of nature of injury codes associated with higher median costs occur relatively less frequently than the most common nature of injury codes selected in the sample set.

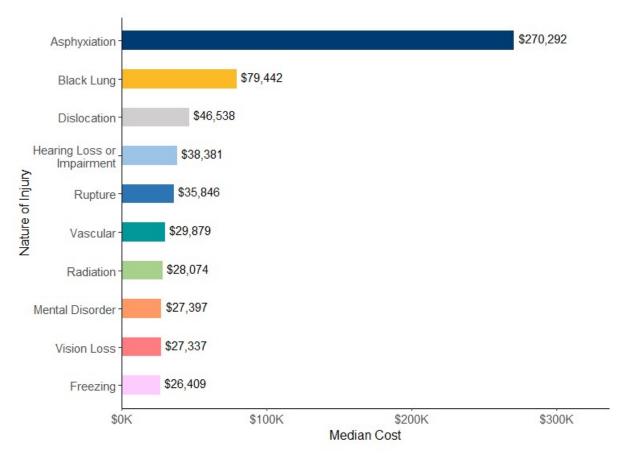


Figure 1.16 Top Ten Natures of Injury by Median Total Cost



2. Judicial Outcomes of Closed Claims

2.1 Judicial Initiation and Resolution of Closed Claims

Although claims are often resolved without recourse to the judicial system, the resolution of claims frequently requires some form of judicial action. For the purpose of the present study the claim is judicially initiated when either 1) a claimant or a claimant's surviving spouse, dependent, employer their attorneys request judicial review of a claim through the filing of an E1/E2 (Application for Benefits)³, or 2) a claimant and their employer file a formal settlement that must be approved by an Administrative Law Judge (ALJ)⁴.

Of the 6616 closed claims, 6616 claims are used in this judicial study. 4064 claims required some form of judicial action. Of these, 378 claims were judicially initiated, but resolved extra-judicially⁵. A claim is considered judicially resolved when the claim reaches a formal settlement or a final decision regarding benefits is reached by an ALJ. The remaining 2552 claims were not judicially resolved. Figure 2.1 shows the breakdown of claims in the study according to their path to resolution (judicially resolved, judicially initiated but not judicially resolved, or not judicially resolved.

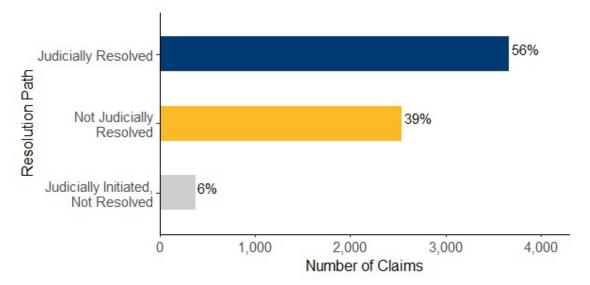


Figure 2.1 Total Number of Closed Claims by Resolution Path

To gain a better understanding of the ways that claims may be resolved, claims were analyzed according to the type of resolution that occurred. The resolution of a claim takes many forms. Among judicially resolved claims, there are various ways that resolution can occur, and as mentioned above, a claim may also be resolved between a claimant and their employer with or without recourse to the judiciary. The resolution type of a claim was categorized according to the following definitions:

Award: compensation determined by decision of an ALJ

³ The E1 is the standard filing for seeking benefits, while an E2 is filed by a deceased claimant's surviving spouse, dependent, or heir.

⁴ Note that this includes Special Administrative Law Judges, which are appointed under certain circumstances as prescribed by law, and which typically oversee settlement hearings.

⁵ While a claim may go through various of the judicial process, there are cases in which the claim is nevertheless resolved extra-judicially. These are claims in which an E1 is filed, but no other judicial events occurred before the claim filed an FN to close.



Agreed Awards: compromises that require oversight of an ALJ. For the purposes of the present study, includes true Agreed Awards, Redemption Settlements, and Joint Petition/Stipulation

Docketed Settlement: settlement arrived at after filing application for hearing

Undocketed Settlement: settlement approved without prior filing of application for hearing

Dismissed/Partial Denial: judiciary denies some portion of benefits, or case ultimately dismissed with no further benefits awarded. Involves cases for which benefits are paid, but claimant seeks further benefits through judicial process, or cases in which some portion of benefits is reimbursed to the

Non-Judicial Resolution: benefits conferred without reaching resolution via judicial intervention

In Process: A claim with an FN, that has some form of judicial initiation, but final resolution has not been reached.

Of all closed claims in the study, 38.57% had a non-judicial resolution and 6.95% were in process. Of the remaining 3608 claims that were judicially resolved, most (1854 claims) were resolved by means of an undocketed settlement. The next most common type of resolution was a docketed settlement (1634 claims). Only 46 claims resulted in awards, 38 resulted in agreed awards, and 32 were partially denied or dismissed from further consideration. Importantly, these figures seem to indicate that most claims result in a settlement or resolution between parties without recourse to the judiciary. Only a small percentage of claims—just 1.75%—require a final decision regarding benefits by means of an ALJ.

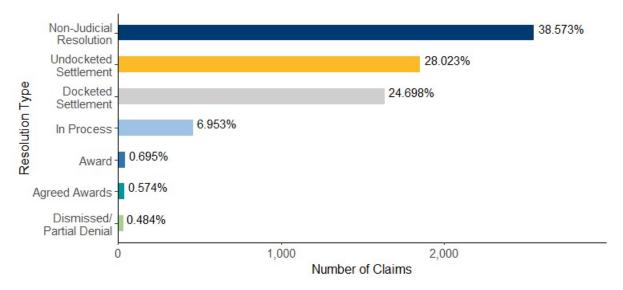


Figure 2.2 Total Number of Closed Claims by Resolution Type

2.2 Hearings Associated with Closed Claims

Claims that have been judicially initiated typically require at least one hearing on their way to resolution. Of the 4064 claims in the present study that required some form of judicial action., 3978 (97.9% of judicially initiated claims, 60.1% of all claims) required a hearing. Figure 2.1 illustrated that only 6% of claims that file an E1 to initiate the judicial process are resolved outside of that process. This seems to indicate that, for the majority of claims, simply filing an E1 is not sufficient to resolve benefit disputes, but that a hearing is needed in order to further the process. Note that the overwhelming majority of hearings that are held are settlement hearings. If settlement hearings are excluded, only 90 claims (2.2% of judicially initiated claims, 1.4% of all claims) required a hearing. Figure 2.3 shows the number of claims that required at least one hearing for each resolution type.



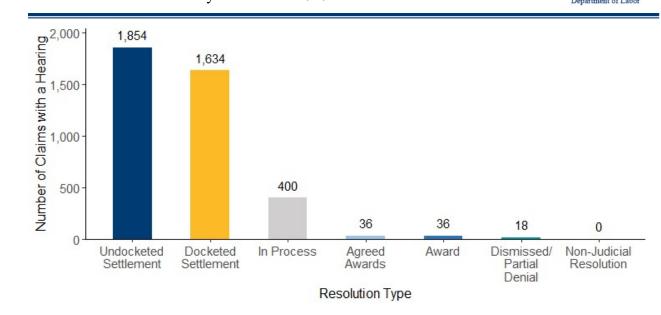


Figure 2.3 Number of Claims with at Least One Hearing, by Resolution Type

In terms of the overall number of hearings, there were a total of 8100 hearings associated with the claims in the present study. Of these, 6846 (84.5%) were associated with a claim that resulted in a settlement. Figure 2.4 shows the number of hearings held according to the resolution type of the claim.

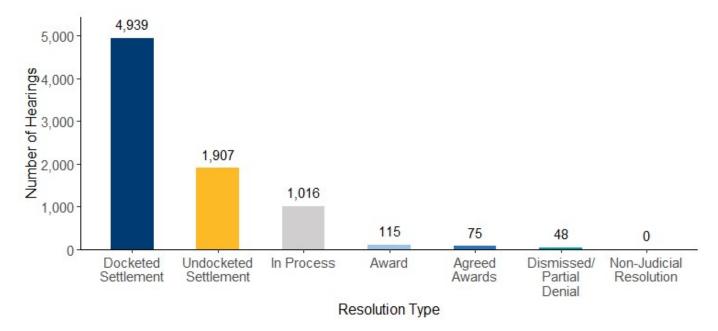


Figure 2.4 Total Number of Hearings by Resolution Type



Judicially initiated claims varied in the number of hearings that were required on their way to resolution. Figure 2.5 shows the distribution of claims in the study according to the number of hearings that were held. While 86 claims in the study did not require a hearing at all (2.1% of judicially initiated claims)⁶, most required only one hearing (2354 claims, 59.2% of judicially initiated claims).

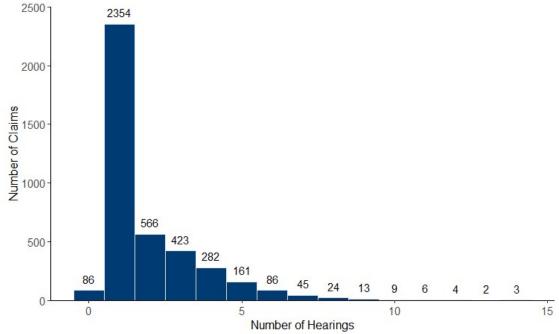


Figure 2.5 Histogram of Number of Hearings per Claim

Table 2.1 shows the data for Figure 2.5, listing the count of claims in the study with the number of corresponding hearings, along with the cumulative percentage of judicially initiated claims that required that number of hearings. As seen there, 74.0% of judicially initiated claims required two hearings or fewer.

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⁶ Interestingly, judicially initiated claims sometimes do not require a hearing to be held at all. Sometimes, a claim for which an E1 is filed is settled before any hearing is necessary. In such cases, it often seems to be that the threat of judicial entanglement is sufficient motivation for reaching a settlement.



Hearings	Number of Claims	% of Total
1	2354	60%
2	566	7496
3	423	84.4%
4	282	91.3%
5	161	95.3%
6	86	97.4%
7	45	98.5%
8	24	99.1%
9	13	99.4%
10	9	99.6%
11	6	99.8%
12	4	99.9%
13	2	99.9%
14	3	100%

Table 2.1 Count of Claims by Number of Hearings, with Cumulative Percentage of Judicially Initiated Claims

As to the average number of respective hearings, claims vary primarily in terms of the resolution type that they result in. Figure 2.6 shows the mean number of hearings per claim for each resolution type. Interestingly, claims that resulted in a docketed settlement required the greatest number of hearings, on average (3.02 hearings per claim). Claims resulting in an award required the next greatest number of hearings on average at 2.5, followed by agreed awards at 1.97 hearings (excluding in process claims), ultimately dismissed/partly denied claims at 1.5 hearings, and undocketed settlements at 1.03 hearings. Only rarely did a judicially initiated claim with a non-judicial resolution ever have a hearing held, with an average under 0.01 hearings. That claims resulting in docketed settlements had 3.02 hearings on average indicates that most of these had at least one hearing prior to the settlement hearing.⁷

⁷ The 1.02 hearings on average for undocketed settlements is due to a small number of claims that end up having a second hearing for some reason or other after the settlement is initially approved.



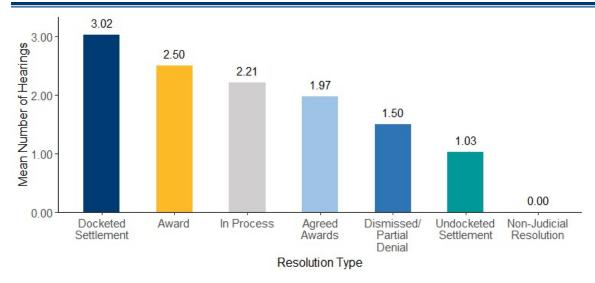


Figure 2.6 Mean Number of Hearings per Claim by Resolution Type

2.3 Judicial Time of Closed Claims

This section reports the amount of time that judicially initiated claims spent in the judicial system. Due to the widely varying nature of injuries and costs, claims vary as to the extent of time in the judicial process that is required to mediate them. For the purposes of the present study, the "judicial time" of a claim, or time that a claim spends in the judicial system, is defined here as the number of days between the first official judicial filing and the earlier of 1) the claim closure date or 2) the last judicial resolution point (the most recent acceptance or rejection of a matter involving benefits dispensation; includes settlement dates, (agreed) award approval dates, dismissal or denial orders, or otherwise date most recent hearing was held).

Table 2.2 shows the count of claims in the study resolving within a corresponding range of years, along with the cumulative percentage of claims that lasted that length of time. As can be seen, the largest proportion of the judicially initiated claims (759, or 34.4% of judicially initiated claims) spent one to two years in the judicial system followed closely by those that spent 1 year or less (703, or 31.8% of judicially initiated claims) Only infrequently did a claim in the study last longer than four years, with 91.2% of all claims resolving before four years had passed. The longest running claim in the study lasted slightly under 15 years (specifically, 5460 days, roughly 14 years 11 months).



Years	Number of Claims	% of Total
0 - 1	703	31.8%
1-2	759	66.2%
2 - 3	364	82.6%
3 - 4	189	91.2%
4 - 5	88	95.2%
5 - 6	43	97.1%
6 - 7	34	98.6%
7-8	9	99%
8 - 9	6	99.3%
9-10	3	99.5%
10-11	2	99.5%
11 - 12	4	99.7%
12 - 13	2	99.8%
13 - 14	0	_
14-15	4	100%

Table 2.2 Count of Claims by Length of Judicial Time in Years, with Cumulative Percentage of Total

Figure 2.7 shows the overall mean and median judicial time in days for judicially initiated closed claims, excluding undocketed settlements, which nearly always have a Judicial Time of zero due to the fact that the day that they were officially filed being identical to the settlement hearing date. As noted above, there is a general disparity in judicial times between claims resulting in an undocketed settlement and claims resulting in other outcomes due to this difference in how undocketed settlements are filed.

⁸ Undocketed settlements are excluded here because they obscure important patterns with respect to judicial times, due to the way that they are filed. The first official filling under the data management system in which they were entered was recorded as the same day as the settlement hearing itself, resulting in most such claims having a judicial time of zero days.



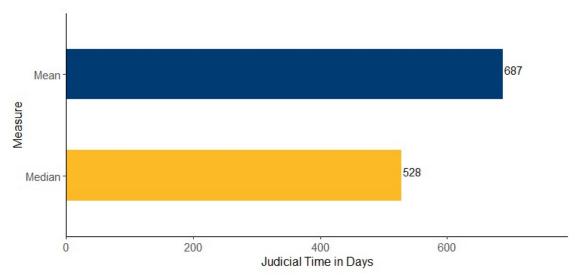


Figure 2.7 Overall Mean and Median Judicial Time in Days (Excluding Undocketed Settlements)

As seen in Figure 2.7, on average, judicially initiated claims in the study (other than undocketed settlements) spent 687 days (1.9 years) in the system, while the median judicial time for the same claims was 528 days (1.4 years). However, the typical time that a claim spends in the judicial process varies widely, depending especially on the type of resolution involved.

Figure 2.8 shows the mean and median judicial time in days broken down according to resolution type. Claims that resulted in Awards (mean 1,240.8 days, median 988.5 days) spent the longest time in the system, with undocketed settlements (mean 168.4 days median 61 days) spending the least.



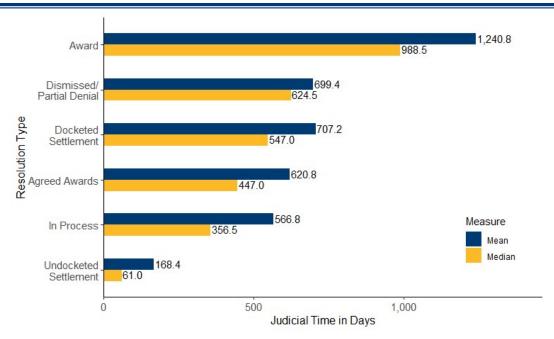


Figure 2.8 Mean and Median Judicial Time in Days by Resolution Type

2.4 Costs Associated With Judicial Outcomes

This section reports basic information regarding the cost of judicially initiated closed claims. There are differences in overall claim costs depending on the path to resolution of a claim, and on the type of resolution that is reached. In general, claims requiring more judicial intervention tend to cost more.

Figure 2.9 shows the mean and median total overall claim cost by resolution path. Claims that are judicially resolved had the highest average and median cost (\$46,451.05 & \$30.335.90) Claims that were not judicially resolved were substantially less costly than the other categories, both in terms of mean (\$12.856.01) and median (\$4,477.30). In fact, the next highest category, judicially initiated, but not resolved claims had a median nearly 5.6 times the median of not judicially resolved claims.



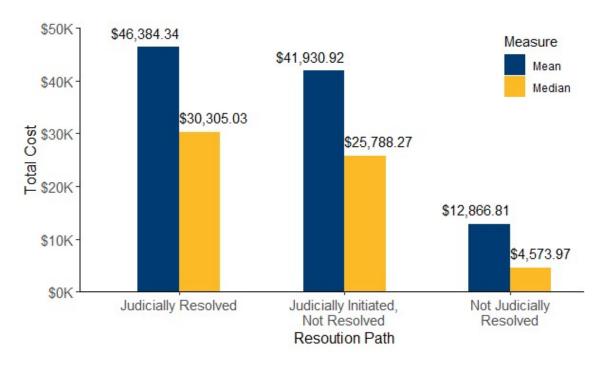


Figure 2.9 Mean and Median Total Claim Cost by Resolution Path

Figure 2.10 shows the mean and median total overall claim cost broken down by resolution type.

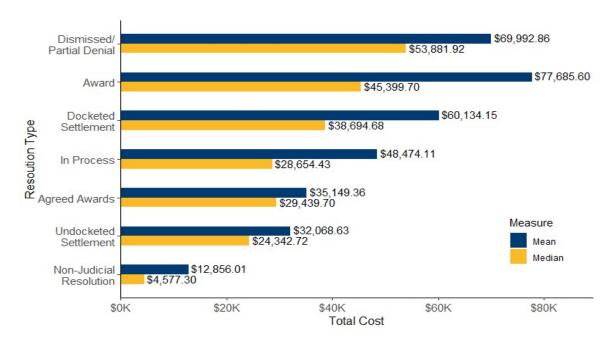


Figure 2.10 Mean and Median Total Claim Cost by Resolution Type



Claims resulting in an award had the highest overall cost in terms of mean (\$77,685.60) but not median (\$45,399.70).

Figure 2.11 shows median total indemnity and total medical cost of claims according to the resolution type. In general, the median cost of indemnity and medical benefits were comparable for a given claim resolution type. Excluding claims in process, undocketed settlements were the only type of resolution for which the median total medical cost (14,228.73) was substantially higher, almost double, as compared to the median total indemnity cost (\$7,941.72). This flip between medical and indemnity costs are likely a result of a difference in the nature of claims that result in undocketed settlements as opposed to claims that result in awards. Agreed awards shows 0 for the medical cost due to the large number of claims with no medical cost listed.



Figure 2.11 Median Total Indemnity and Medical Costs by Resolution Type



Appendix A: Data Set Variables

Claim-related variables

Qualitative:

- Claimant characteristics
 - Age in Years
 - Gender
 - Annual Wage
 - Industry Classification (NAICS code)
- Injury characteristics
 - Type of Loss (Traumatic Injury, Occupational Disease, Cumulative/Repetitive Trauma)
 - Cause of Injury; how the injury occurred
 - Nature of Injury; how body part(s) and/or systems were affected
 - Body Part: which body part(s) and/or systems were affected

Quantitative:

- Cost of individual benefit types
- Aggregated benefit costs (Total Benefits Paid, Indemnity Benefits Paid, Medical Benefits Paid, etc.)

Temporal:

• Claim Time: the number of days between the submission date of the earliest First Report of Injury and the submission date of the final (SROI FN) report

Judicial process variables

Qualitative:

- Resolution Type (Judicially Resolved, Judicially Initiated/Not Resolved, Non-Judicially Resolved)
- Resolution Path (Award, Undocketed Settlement, etc.)
 - Award: compensation determined by decision of an Administrative Law Judge
 - Agreed Awards: compromises that require oversight of an Administrative Law Judge
 - include true Agreed Awards, Joint Petition/Stipulation, Redemption Settlements
 - Settlements:
 - Docketed settlement: settlement arrived at after filing application for hearing
 - Undocketed Settlement: settlement approved without filing of application for hearing
 - Dismissed/Partial Denial: judiciary determines benefits to be partially denied, or case ultimately dismissed with no further benefits awarded. Involves cases for which benefits are paid, but claimant seeks further benefits through judicial process
 - Non-Judicial Resolution: benefits conferred without need for judicial intervention

Temporal:

• Judicial Time: the number of days between the first official judicial filing and the earlier of the claim closure date or the last judicial resolution point (the most recent acceptance or rejection of a matter involving benefits dispensation; includes settlement dates, (agreed) award approval dates, dismissal or denial orders, or otherwise date most recent hearing was held).



Appendix B: Data Methodology

Beginning with the initial data set (n = 5322) Claims were removed if they did not meet a basic threshold for inclusion. Claims that did not have regular benefits reported on their Final (FN) summary EDI (Electronic Data Interchange) reports were excluded $(324 \text{ claims})^9$, as were all claims from a particular EDI trading partner who failed to report any medical payment information (98 claims). We also excluded claims with certain types of claimant information. These included one claim whose claim time was greater than 40 years, and claims with claimants having an annual wage less than \$1500 (86 claims) or greater than \$250,000 (11 claims). Finally, claims were excluded if they were later denied by judicial determination, rendering reported payment information inaccurate (40 claims).

⁹ The failure to include summary indemnity payment information on an indemnity claim indicates a serious reporting error. Because of the complexity of EDI reporting requirements, it is possible for indemnity claims to be closed with information missing on the final report. Claims administrators use a variety of reporting tools, some of which do not automatically calculate benefit summary information on reports.